

Giant Spin Art

Written By: Bob and Pete Goldstein



TOOLS:

- Dremel rotary tool (1)
- Drill with screw bit (1)

PARTS:

- 1×6 wood boards 24" long (4)
 For the frame
- 1×4 wood board 30" long (1)
- Small wood block about the width of your drill (1)
- 5/16" spike T-nut (1)
- 5/16" bolt 1½" long (1)
- Loctite threadlocker glue (1)
- 1½" wood screws (14)
- Canvases Pre-stretched 20" (1)
 Round canvases can be found online at misterart.com for about \$10 each.
 shipped in packs of 6.
- Paint (1)
 We used water-based acrylic paints in squirt bottles.
- Cardboard (1)
- Electric drill (1)
 Corded with a lock to keep the trigger
 held in, and a way to control speed.

Ours has a variable speed wheel on the trigger.

Remote switch extension cord (1)

SUMMARY

Spin art is a children's activity, often found at school fairs. Kids drop paint onto a spinning square of paper, making beautiful, colorful patterns. As adults, we imagined it would be fun to scale this up, and up, and up. Our friends envisioned injuries, or worse — an elaborate, spinning contraption flying high into the sky and disappearing.

So we tried it, and after burning out the motor from a box fan, we realized that a corded power drill would work better. Corded power drills are cheaper than battery-operated drills, and they typically have greater torque. Many even have a speed knob on the trigger, offering more control.

Step 1 — Building the Frame





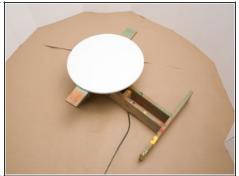


- We mounted our drill pointing straight up, by sandwiching it between two 2' planks and then screwing 2 more 2' planks onto the ends, to make a stable H-shaped frame. To keep the drill from sliding, we also screwed a small wood block against its handle at the bottom. The drill sits snug in the frame, and it can be lifted out easily.
- We locked the drill's trigger in the On position, and then plugged the drill into a switched extension cord so we could turn it on and off remotely.

Step 2 — Attaching the Canvas







- To make an adapter for attaching the drill chuck to the canvas, we drilled a pilot hole through the center of a 30" plank and hammered in a 5/16" spike T-nut. We ran a 5/16" bolt through the nut and added a drop of Loctite to make it hold. To strengthen the drill's grip on the bolt, we used a Dremel to shape it like a hexagonal drill bit.
- Then we drilled a wood screw through each end of the plank, to point up when the bolt points down. We screw the screws farther to attach them to a canvas frame and then flip the assembly over and clamp the bolt in the drill chuck.

Step 3 — Spinning the Canvas







• We've found that any canvas spins pretty smoothly as long as it's centered on the adapter. For canvases more than 2'-3' across, just make sure not to spin for more than a few minutes at a time, to avoid burning out the drill's motor. We put a ring of cardboard around the setup and some paper on the ground so that high-speed paint wouldn't cover the neighborhood.

Step 4 — Warnings

- Watch your knees! And don't lean over the device so far that you fall onto it.
- Stop the device immediately if it ever tips over. We stake ours to the ground.
- Keep electrical plugs out of the area where the paint is; don't mix electricity and liquids.
- To minimize risk of electrocution, plug the device into a ground-fault circuit interrupter outlet. These are often labeled GFI or GFCI, with test and reset buttons on them.

Step 5 — The Results







- Giant spin art has been fun to do with friends. We usually spin 20" round canvases, but sometimes try larger ones. Our record size so far is 4'x3'. Surprisingly, just about every canvas comes out great.
- Bob and Pete Goldstein are brothers who rarely build anything based on their half-baked ideas.

This project first appeared in MAKE Volume 25.

This document was last generated on 2012-11-01 11:29:06 AM.